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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,884	09/24/2003	Bradley W. Smith	AAI-14305	5266

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EXAMINER

CULBRETH, ERIC D

ART UNIT PAPER NUMBER

3616

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,884	Applicant(s) SMITH ET AL.	
	Examiner Eric Culbreth	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/24/03</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Reference numeral 386 (page 35, line 6) is not on the drawings.
- b. On page 18, line 7 "74" should apparently be "76" (reference numeral 74 referred to holes earlier).

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The disclosure is objected to because of the following informalities:

- a. On page 2, lines 15-16 "avoid the occupant" is unclear (awkwardly worded).
- b. On page 11, line 11 "a" should precede "supply".
- c. On page 17, line 13 "be practice" should apparently be "to be practiced".
- d. Page 28, lines 20-21 are an incomplete sentence.
- e. Page 33, lines 9-10 are an incomplete sentence.
- f. Page 32, line 20 to page 33 line 1 is an incomplete sentence.
- g. page 32, lines 6-9 are an incomplete sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 10-11, 19-20 and 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 10, 19 and 28 are indefinite because they are method claims but depend from article claims, hence confusing what statutory class of invention they are.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-2, 6-8, 10, 12, 14, 19, 21, 23, 28, and 30 as best understood are rejected under 35 U.S.C. 102(e) as being anticipated by Yamazaki et al (US006908105B2).

Yamazaki et al discloses first chamber 20 with pyrotechnic gas generating material 21 (column 10, lines 52-61) and an initiator 26, diffuser chamber 30 with gas generant chamber 20 one end and gas storage chamber 14 on the other, and a gas treatment filter 35 in the chamber (note column 8, lines 53-58). Member 38 seals the gas storage chamber, and the seal 38 is ruptured by projectile 34 moved by products of the gas generant (claims 1-2, 6-8, 14, 23). Regarding claims 10, 19 and 28, as

functionally recited, element 35 would be heated by contact with products from generant 21 and the contents from chamber 14 would then contact the heated element 35. The chambers 20 and 14 and diffuser chamber 30 are longitudinally aligned (claims 12, 21, and 28).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 13, 22 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al.

Disposing Yamazaki et al's chambers side by side instead of longitudinally aligned would be an obvious matter of design choice, as case law holds that there would be no invention in shifting parts to a different position since the operation of the device would not thereby be modified (In re Japiske, 86 USPQ 70 (CCPA 1950)).

11. Claims 3-5, 11, 15-17, 20, 24-26 and 29 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al in view of Moore et al (US006244623B1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamazaki et al to include nitrous oxide and an inert gas as taught by Moore et al in order use a safe thermally stable material and supplement the gas produced or formed upon dissociation (Moore et al, column 8, line 60 to column 9, line 39). As functionally recited in claims 11, 20 and 29, as functionally recited the gas in Yamazaki et al's stored gas chamber, which would be nitrous oxide and the inert in the combination, would dissociated when contacting the filter 35 of Yamazaki et al heated by the gas from the gas generant into a molar composition according to the equation in column 9, lines 5-10 of Moore et al, where the second molar content is greater than the first.

12. Claims 9, 18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki et al in view of Haland et al (US Patent 5,788,270, of record, cited by applicant).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yamazaki et al to include a side bag curtain as taught by Haland in order to protect occupants in a side collision.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rink et al (US006332404B1), Zimbrich et al (US006601872B2) and Dolling et al US006786507B2) show aligned gas chambers and gas generating chambers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric Culbreth
Primary Examiner
Art Unit 3616



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